

Patent Claims

1. Bus bar connection (SSK) for a gas-insulated switchboard system with at least two switchboard sections (F1, F2) that are filled with insulating gas (IG) and which are connected to one another by at least one electrical connection element (KS) that is part of the bus bar connection (SSK), characterized in that the bus bar connection (SSK) incorporates bellows (FB) that can be installed between the switchboard sections (F1, F2), which can be filled with insulating gas (IG), and which enclose the electrical connection element (KS) of the bus bar connection (SSK) so that it is gastight.
2. Bus bar connection (SSK) as defined in Claim 1, characterized in that the electrical connection element (KS) is disposed so as to be axially displaceable at the end of a bus bar tube (SR2).
3. Bus bar connection (SSK) as defined in Claim 1, characterized in that the bellows (FB) are of metal; and in that the bellows (FB) have sealing elements (OR) and attachment elements (M) that can be installed from outside the bellows (FB) and form a positive, force-derived seal with the outside walls of the switchboard sections (F1, F2).
4. Bus bar connection (SSK) as defined in Claim 3, characterized in that the sealing elements include annular seals (OR); and in that the attachment elements include screw-type connectors (M).
5. Bus bar connection (SSK) as defined in one of the preceding Claims, characterized in that the electrical coupling element (KS) of the bus bar connection (SSK) forms an electrically conductive clamped connection between the switchboard sections (F1, F2).
6. Bus bar connection (SSK) as defined in one of the preceding Claims, characterized in that the bus bar connection (SSK) connects the bus bar tubes (SR1, SR2) of the switchboard sections (F1, F2) to each other; and in that the end of one of the bus bar tubes (SR2) or the ends of both bus bar tubes (SR1, SR2) extend into the area of the bus bar connection (SSK) enclosed by the bellows (FB), so that in order to fill the bellows (FB) with gas, the insulating gas

can flow into the bellows (FB) through one (SR2) of the bus bar tubes or through both bus bar tubes (SR1, SR2).

7. Bus bar connection (SSK) as defined in one of the preceding Claims, characterized in that the electrical connection element is a clamp (KS) that incorporates tension springs or tension washers, and is pressed against the inside walls of the bus bar tubes (SR1, SR2); and in that the clamp (KS) forms an electrically conductive connection between the bus bar tubes (SR1, SR2) that is not, however, a mechanical seal, so that the insulating gas (IG) flows from the one bus bar tube (SR2) into the other bus bar tube (SR1) as well as into the interior of the bellows (FB).
8. Gas-insulated switchboard system, in particular a gas-insulated medium-voltage switchboard system, with at least two switchboard sections (F1, F2) that are both filled with insulating gas (IG) and connected to each other through at least one bus bar connection (SSK) that incorporates an electrical coupling element (KS), characterized in that the bus bar connection (SSK) incorporates bellows (FB) that are installed between the switchboard sections (F1, F2) and filled with insulating gas (IG) and encloses the electrical connection element (KS) of the bus bar connection (SSK) so that it is gastight.